Non-paper on open science: open access to publications and data

3 March 2015 - United Kingdom and the Netherlands

Taxpayers' money should be spent in a rational and efficient way. In its Communication of 17 July 2012 and the attached Recommendation to the member states, the Commission set out its view that an effective, fast and economically productive way to do so is by furthering open access to scientific publications – journals and monographs – and data.

Transparency, openness, accountability and public engagement with research will be strongly enhanced by publishing articles in open access and/or depositing post review[1] articles in a repository without an embargo or with an embargo period that is as short as possible.

Acknowledging the different views of member states on how to achieve open access and recognizing the right of member states to establish their own policy towards the subject, this non-paper seeks to describe the mutual agreement of member states on the importance of open access for a successful European Research Area. The focus is on open access to publications, but this cannot be isolated from open access to the underlying data, which is equally important.

The annex summarizes the challenges, practical ambitions and possible transition paths. If open access is to be successfully and sustainably adopted by member states, as recommended by the Commission, a new business model is required where society at large has free and unlimited access to all scientific and academic journals and the article processing costs (APC's) are paid through another means.

Our shared common goals

- To achieve open (i.e. free and unlimited) access to scientific publications based on publicly funded research for end-users everywhere in the world.
- To strive for and support open access to the underlying data, make data interoperable and easy to re-use.
- To ensure a sustainable future for open access academic publishing.
- To implement open access in a way that is straightforward and easy to understand providing clarity and stability to universities, institutions, researchers, funders and publishers.
- To promote a universal, simple and straightforward approach to re-use of data and publications without restriction (as described by the CC-BY licence).

This non-paper can be used as the basis for sending a strong signal, i.e. that nations want to make progress on open access within the framework of the European Research Area (ERA).

We propose that this signal could take the form of a letter signed by all willing member states during a future informal meeting, or en marge of a coming Competitiveness Council and that this non-paper be approved by the Member States willing to sign such a letter. Some of these member states could agree to write a draft version of such a letter.

[1] Post review means the last level before final publication.

The proposed letter could recommend that the new European Commission develops an initiative in which it encourages the member states to:

- Monitor the rapid developments in the area of open access, and be as open and constructive as possible towards new developments in the communication of scientific ideas, and where possible facilitate and encourage them;
- To take action to publish a national policy on open access in which they take a clear position and announce measures to further open access where:
  - Member states will be free to opt for the Gold or the Green models or a mix of those two;
  - Member states who choose the Green model should mandate only the shortest possible embargo periods with a version as close to the final published version as possible, in line with the Commissions guidance;
  - New open-access initiatives that are not based on the traditional publishing model should also be encouraged to help create an open market with more efficient and competitive fees. In support of academic freedom and research excellence, researchers should have access to these new models on a level basis with traditional models.

In addition, at national level:

- Member states will encourage their funding organizations to join forces to exchange information and best practices in order to maximise negotiating power in achieving the best value and sustaining progress through the transition;
- Member states will encourage their research funding organisations to fund APCs as a core part of research projects;
- Member states will encourage their research- and higher education institutions to actively manage the change in budget administration to support the transition to open access whilst balancing the funding of APCs and subscription fees without disadvantages for individual researchers.

and at the same time at the European/worldwide level:

- Member states will advocate open access in other multilateral organizations, such as the OECD, G8, UN including UNESCO, CERN, EMBL/EMBO, ESO, etc.
- Member states who are willing to lead the initiative can use their combined power to discuss changes to the business model with the largest publishing companies operating in Europe and to develop and experiment with other models. A transitional step could be European wide open access providing open access for every European citizen. A combined approach will be less expensive than if each country had to deal with publishers separately, but to provide open access to public funded research results worldwide open access should remain the main goal.

Last but not least:

Only when member states act together on all these suggested actions at the national level will it provide the most effective means of persuading publishers to implement open access models that have transparent and competitive pricing of APC's and can have reasonable embargo periods.

Annex - Background Information

In its Communication of 17 July 2012 and the attached Recommendation to the member states, the Commission set out its view on 'better access to scientific information' which included:

- the notion that we should strive for open access to scientific publications;
- a short analysis of the advantages of open access to scientific publications;
- an analysis of the stakeholders involved, including their interests;
- possible transition paths, including the so-called Gold and Green models;
- a description of the way the Commission will encourage open access to scientific publications through her own instruments, notably Horizon 2020.

An open access approach is of value to member nations and their citizens because

- It accelerates science itself, by making it possible for other researchers to build on previous research quickly and unlimited;
- It facilitates scientific collaboration, avoids costly duplication of research, helps enable replication in science and protects against scientific fraud;
- It accelerates innovation, because the results of research can be used quickly and without restriction to create innovative products.

It accelerates the uptake of research results by society at large.

In parallel with, and starting from the Communication and Recommendation, various member states have developed different approaches towards open access. Some have announced policies that declare a preference for the Gold model (notably the UK and the Netherlands), or the Green model (for example Germany and Denmark), whereas others are still developing their policies.

In addition to open access to publications open access to the underlying data has become equally if not more important than open access to the publications. Open access to data is part of the new development 'Science 2.0', on which the European Commission started a consultation this summer. The results of this consultation will be available before the end of this year and will be used by the European Commission for a Communication/Recommendation on Science 2.0. This Communication/Recommendation will inevitably include actions and goals around both open access for publications and data.

To gain experience with open access to data for some parts in Horizon 2020 a pilot for Open Access to data has been set up, in which applicants/consortia have the choice to opt in or opt out.

Key stakeholders

Academic publishers provide a valuable service in providing a system for peer reviewed publication. Member states and research funders acknowledge that the facilitation of an adequate and sustainable system for peer review, publication, discoverable storage and access by academic publishers incurs legitimate and significant costs that publishers are entitled to recoup.

For researchers, publications are the instrument to communicate ideas, to report findings and to measure quality and, most important of all, the instrument to establish a reputation and career. Researchers should not be hindered in all this during the transition to other business models. The move to open access should not be burdensome to researchers and should adopt a straightforward

and transparent approach wherever possible; successful implementation of open access will further empower researchers giving the community a more powerful connection to academic publication.

Current model

The most currently used business model for academic publishing is to let researchers submit articles for free but to charge the readers. This is not the road to open access, as without a license for the journal or without paying for the article, no one has access to the latest scientific articles.

Further the current publishing model is unlikely to be sustainable in the long term. There has been a sustained global growth in the number of academic papers and journals that is expected to continue and which will also continue to drive up total subscription costs in the long term until it becomes unsustainable for universities and institutions.

New models

The increasing adoption of open access policies from major global funders has led to the development to a range of possible future funding models, for example, through author fees (APCs) funding Gold open access wherever possible, or Green open access where public access to articles (through an academic repository or publisher) is free after a minimal embargo. During transition, measures will be required on other subscription/licensing costs to prevent excessive total costs where institutions/researchers pay both APCs and licences for a mix of open access and non-open access journals.

In addition, new open access initiatives are emerging that move away from the traditional publishing model. These new models should also be encouraged to help create an open market with more efficient and competitive fees. In order to prevent large price increases in APCs indeed more market play is needed, but also transparency in how APC's are designed.

In support of academic freedom and research excellence, researchers should have access to these new models on a level basis with traditional models.